

CLAIM AMENDMENTS

18. (currently amended) A method of improving drug solubility by processing said drug into a surfactant-coated ~~making a~~ micro and nano-particulate ~~form drug~~, the steps comprising:

~~providing a drug substance surfactant mixture;~~

melting a sufficient amount of a drug in a molten surfactant miscible with said drug, to form a drug-surfactant mixture;

heating the mixture to a temperature above said mixtures melting temperature, and below said drug's decomposition temperature until ~~such that~~ a clear mixture is formed; and

cooling the mixture to approximately room temperature while continuously mixing under high shear in order to maximize precipitation of drug particles to approximately room temperature, wherein a non-crystalline substance forms or crystals precipitate coated with said surfactant and having a greater rate of dissolution than pure unprocessed drug during crystallization.

19. (canceled)

20. (canceled)

21. (currently amended) The method of claim 20, wherein said drug ~~substance~~ is micronized prior to adding to said surfactant.

22. (currently amended) The method of claim 18, wherein said drug ~~substance~~ is selected from the group consisting of: analgesics, anti-inflammatory agents, anthelmintics, anti-arrhythmic agents, antibiotics, anticoagulants, antidepressants, antidiabetic agents, antiepileptics, antihistamines, antihypertensive agents, antimuscarinic agents, antimycobacterial agents, antineoplastic agents, immunosuppressants, antithyroid agents, antiviral agents, anxiolytic sedatives, astringents, beta-adrenoceptor blocking agents, blood products and substitutes, cardiac inotropic agents, contrast media, corticosteroids, cough suppressants, diagnostic agents, diagnostic imaging agents, diuretics, dopaminergics, haemostatics,

immunological agents, lipid regulating agents, muscle relaxants, parasympathomimetics, parathyroid calcitonin and biphosphonates, prostaglandins, radio-pharmaceuticals, sex hormones, anti-allergic agents, stimulants and anoretics, sympathomimetics, thyroid agents, vasodilators, xanthines, and mixtures thereof.

23. (original) The method of claim 18, wherein said surfactant is an organic excipient.

24. (currently amended) The method of claim 23, wherein said excipient is selected from the group consisting of ~~low molecular weight oligomers, natural products~~, gelatin, casein, gum acacia, cholesterol, tragacanth, stearic acid, benzalkonium chloride, calcium stearate, glyceryl monostearate, cetostearyl alcohol, cetomacrogol emulsifying wax, sorbitan esters, polyoxyethylene alkyl ethers, macrogol ethers, polyoxyethylene castor oil derivatives, polyoxyethylene sorbitan fatty acid esters, polyethylene glycols, polyoxyethylene stearates, colloidal silicon dioxide, phosphates, sodium dodecylsulfate, carboxymethylcellulose calcium, carboxymethylcellulose sodium, methylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropylmethylcellulose phthalate, noncrystalline cellulose, magnesium aluminum silicate, triethanolamine, polyvinyl alcohol, and polyvinylpyrrolidone, polyvinyl alcohol, polyvinyl pyrrolidone, dextran, lecithin, polyvinylpyrrolidone, and organic solvent.

25. (original) The method of claim 18, wherein said surfactant is nonionic or anionic.

26. (original) The method of claim 18, wherein said drug is used in a pharmaceutically acceptable carrier.

27. (original) The method of claim 26, wherein said pharmaceutically acceptable carrier is selected from the group consisting of diluents, binders, adhesives, lubricants, plasticizers, disintegrants, colorants, bulking substances, flavorings, sweeteners, buffers, and absorbents.

28. (original) The method of claim 27, wherein said binder is selected from the group consisting of hydroxypropylmethylcellulose, ethylcellulose, povidone, acrylic, methacrylic acid co-polymers, pharmaceutical glaze, gums, and milk derivatives.

29. (canceled)

30. (currently amended) The method of claim 18, wherein said ~~particles~~crystals have a ~~particle~~ size of less than 5 microns.

31. (currently amended) The method of claim 18, wherein said particles ~~crystals~~ have a ~~particle~~ size of less than 400 nm.

32. (currently amended) The method of claim 18, wherein said particles~~crystals~~ have a ~~particle~~ size of less than 250 nm.

33. (currently amended) The method of claim 18, wherein ~~an~~ the average particle ~~size of said crystals~~ is less than about 100 nm.

34. (currently amended) The method of claim 18, wherein ~~an~~ the average particle size ~~of said crystals~~ is less than about 250 nm.

35. (currently amended) The method of claim 18, wherein at least 50% of said ~~crystals have a~~ particles have a size of less than 5 microns.

36. (currently amended) The method of claim 18, wherein at least 75% of said ~~crystals have a~~ particles have a size of less than 5 microns.

37. (canceled)

38. (previously presented) The micro or nano-particulate drug composition prepared according to the method of claim 18.